What is claimed is:

1. An electrophotographic photoconductor, comprising:

an electroconductive substrate;

a charge generation layer; and

a charge transport layer formed by using a halogen-free solvent, arranged in this order,

wherein the charge generation layer comprises:

a charge generation material in the form of particles having an average particle diameter smaller than a surface roughness of a plane where the charge generation layer is arranged ; and

a polyvinyl acetal resin having a ratio Mw/Mn of a weight-average molecular weight Mw to a number-average molecular weight Mn is 2.2 or more.

2. A electrophotographic photoconductor according to Claim 1, wherein the plane where the charge generation layer is arranged is a surface of the electroconductive substrate.

3. An electrophotographic photoconductor according to Claim 1, further comprising an interlayer disposed between the electroconductive substrate and the

charge generation layer, wherein the plane where the charge generation layer is arranged, is a surface of the interlayer.

4. An electrophotographic photoconductor according to Claim 1, wherein the average particle diameter of the charge generation material is 0.3 μm or less and is two-thirds or less of the surface roughness of a plane where the charge generation layer is arranged, and wherein the polyvinyl acetal resin has a number-average molecular weight Mn in terms of polystyrene of 100,000 or more.

5. An electrophotographic photoconductor according to Claim 1, wherein the charge generation material is a titanyl phthalocyanine.

6. An electrophotographic photoconductor according to Claim 5, wherein the titanyl phthalocyanine shows a maximum diffraction peak at 27.2±0.2° in terms of Bragg 2θ angle to the CuK-α characteristic X-ray wavelength at 0.1542 nm.

7. An electrophotographic photoconductor according to Claim 6, wherein the titanyl phthalocyanine

shows a maximum diffraction peak at 27.2±0.2° and a peak as a lowest-angle peak at 7.3±0.2° and shows no peak in a range between 7.4° and 9.4° in terms of Bragg 2θ angle to the CuK-α characteristic X-ray wavelength at 0.1542 nm.

8. An electrophotographic photoconductor according to Claim 7, wherein the titanyl phthalocyanine shows no peak at 26.3° in terms of Bragg 2θ angle to the CuK-α characteristic X-ray wavelength at 0.1542 nm.

9. An electrophotographic photoconductor according to Claim 5, wherein the charge generation layer is formed by a process comprising the steps of:

dispersing particles of the titanyl phtalocyanine so as to have an average particle diameter of 0.3 μm or less with a standard deviation of 0.2 μm or less, to yield a dispersion;

filtering the dispersion through a filter having an effective pore size of 3 μm or less; and

applying the filtered dispersion to form the charge generation layer.

10. An electrophotographic photoconductor according to Claim 5, wherein the titanyl phthalocyanine is prepared by the process comprising the steps of:

subjecting an amorphous titanyl phthalocyanine or low-crystallinity titanyl phthalocyanine to crystal transformation using an organic solvent in the presence of water, the amorphous titanyl phthalocyanine or low-crystallinity titanyl phthalocyanine showing a maximum diffraction peak (±0.2°) at least at 7.0° to 7.5° with a half width of 1° or more in terms of Bragg 2θ angle to the CuK-α characteristic X-ray wavelength at 0.1542 nm and having an average primary particle diameter of 0.1 μm or less; and

fractionating and filtering the crystal-transformed titanyl phthalocyanine from the organic solvent before the transformed crystals of the titanyl phthalocyanine grow to have an average primary particle diameter more than 0.3 μm.

11. An electrophotographic photoconductor according to Claim 1, wherein the charge transport layer comprises polycarbonate having a triarylamine structure in at least one of principal chain and side chain thereof.

12. An electrophotographic photoconductor according to Claim 1, further comprising a surface protective layer on or above the charge transport layer.

13. An electrophotographic photoconductor according to Claim 12, wherein the surface protective layer comprises at least one of an inorganic pigment and a metal oxide each having a specific resistance of 10^{10} Ω·cm or more.

14. An electrophotographic photoconductor according to Claim 13, wherein the metal oxide is at least one selected from the group consisting of alumina, titanium oxide and silica each having a specific resistance of 10^{10} Ω·cm or more.

15. An electrophotographic photoconductor according to Claim 14, wherein the metal oxide is α-alumina having a specific resistance of 10^{10} Ω·cm or more.

16. An electrophotographic photoconductor according to Claim 12, wherein the surface protective layer comprises a polymeric charge transport material.

17. An electrophotographic photoconductor according to Claim 1, wherein the electroconductive substrate has an anodic oxidation coating on the surface thereof.

18. An electrophotographic photoconductor according to Claim 1, wherein the halogen-free solvent is at least one of cyclic ethers and aromatic hydrocarbons.

19. A process for manufacturing the electrophotographic photoconductor, comprising the step of:

applying a coating solution of a charge transport layer so as to form the charge transport layer above a charge generation layer, wherein the coating solution comprises a charge transport material and a halogen-free solvent which is at least one of cyclic ethers and aromatic hydrocarbons,

wherein electrophotographic photoconductor, comprising:

an electroconductive substrate;

the charge generation layer; and

the charge transport layer, arranged in this order,

wherein the charge generation layer comprises:

a charge generation material in the form of particles having an average particle diameter smaller than a surface roughness of a plane where the charge generation layer is arranged ; and

a polyvinyl acetal resin having a ratio Mw/Mn of a weight-average molecular weight Mw to a

number-average molecular weight Mn is 2.2 or more.

20. An image forming apparatus comprising:

an image forming unit which comprises,

an electrophotographic photoconductor,

a charging unit configured to charge the electrophotographic photoconductor,

a light-irradiating unit configured to irradiate the charged electrophotographic photoconductor with imagewise light so as to form a latent electrostatic image on the electrophotographic photoconductor,

a developing unit configured to develop the latent electrostatic image with a toner housed therein so as to form a toner image, and

a transferring unit configured to transfer the toner image to a recording material,

wherein the electrophotographic photoconductor comprises:

an electroconductive substrate;

a charge generation layer; and

a charge transport layer formed by using a halogen-free solvent, arranged in this order,

wherein the charge generation layer comprises:

a charge generation material in the form of particles having an average particle diameter smaller than

a surface roughness of a plane where the electroconductive substrate is arranged; and

a polyvinyl acetal resin having a ratio Mw/Mn of a weight-average molecular weight Mw to a number-average molecular weight Mn is 2.2 or more.

21. An image forming apparatus according to Claim 20, wherein the image forming apparatus comprises a plurality of the image forming unit.

22. An image forming apparatus according to Claim 20, wherein the light-irradiating unit is one of a light emitting diode and a semiconductor laser system.

23. An image forming apparatus according to Claim 20, wherein the charging unit is a contact charging unit.

24. An image forming apparatus according to Claim 20, wherein the charging unit is a non-contact charging unit.

25. An image forming apparatus according to Claim 24, wherein the charging unit comprises a charger in which the charger is disposed so as to form a gap between

the charger and electrophotographic photoconductor being 200 μm or less.

26. An image forming apparatus according to Claim 20, wherein the charging unit is so configured as to apply a voltage superimposed with an alternating voltage.

27. A process cartridge for image forming apparatus, comprising:

an electrophotographic photoconductor; and

at least one of:

a charging unit configured to charge the electrophotographic photoconductor;

a developing unit configured to develop a latent electrostatic image formed on the electrophotographic photoconductor with a toner so as to form a toner image;

a transferring unit configured to transfer the toner image to a recording material; and

a cleaning unit configured to remove the residual toner on the electrophotographic photoconductor after transferring the toner image,

wherein the process cartridge is detachably assembled to a main body of image forming apparatus, and

wherein the electrophotographic photoconductor comprising:

an electroconductive substrate;

a charge generation layer; and

a charge transport layer formed by using a halogen-free solvent, arranged in this order,

wherein the charge generation layer comprises:

a charge generation material in the form of particles having an average particle diameter smaller than a surface roughness of a plane where the electroconductive substrate is arranged; and

a polyvinyl acetal resin having a ratio Mw/Mn of a weight-average molecular weight Mw to a number-average molecular weight Mn is 2.2 or more.